

IN THE CLAIMS:

1. (Previously Amended) A method for normalizing metric values in a decoder which uses a plurality of metric values of a next state said each metric value having at least a survival path metric value and a competition path metric value, the method comprising the steps of:

detecting the survival path metric values out of the metric values;
detecting a minimum survival path metric value out of the detected survival path metric values;

determining whether the detected minimum survival path metric value exceeds a threshold value; and

subtracting, when the minimum survival path metric value exceeds the threshold value, the detected minimum survival path metric value from the detected survival path metric values, to output normalized metric values.

2. (Previously Amended) A device for normalizing metric values in a decoder which uses a plurality of metric values of a next state, said each metric value having at least a survival path metric value and a competition path metric value, the device comprising:

a comparator for

detecting the survival path metric values out of the metric values,
detecting a minimum survival path metric value out of the detected survival path metric values, and

outputting the minimum survival path metric value when the detected minimum survival path metric value exceeds a threshold value; and

subtracters for subtracting the detected minimum survival path metric value from the detected survival path metric values.

3. (Currently Amended) A method for normalizing metric values in a decoder which uses a plurality of metric values of a next state, said each metric value having at least a survival path metric value and a competition path metric value, the method comprising the steps of:

detecting the competition path metric values out of the metric values;
detecting a minimum competition path metric value out of the detected competition path metric values;

determining whether the detected minimum competition path metric value is greater than a threshold value; and

subtracting, when the detected minimum competition path metric value is greater than the threshold value, a given normalization value ~~to~~ from the metric values, to ~~from~~ output normalized metric values.

4. (Previously Amended) A device for normalizing metric values in a decoder which uses a plurality of metric values of a next state, said each metric value having at least a survival path metric value and a competition path metric value, the device comprising:

a comparator for

- detecting the competition path metric values out of the metric values,
- detecting a minimum competition path metric value out of the detected competition path metric values, and
- outputting a reference metric value when the detected minimum competition path metric value is greater than a threshold value; and

subtracters for subtracting the reference metric value from the detected competition path metric values.

5. (Currently Amended) A method of normalizing metric values in a decoder which uses a plurality of next state metric values, each of said metric values having at least a survival path metric value and a competition path metric value, the method comprising the steps of:

- detecting the survival path metric values out of the metric values;
- detecting a minimum survival path metric value out of the detected survival path metric values;
- determining whether the detected minimum survival path metric value exceeds a threshold value; and
- subtracting, when the minimum survival path metric value exceeds the threshold value, the minimum survival path metric value from the metric values, to output normalized metric values;
- detecting the competition path metric values out of the metric values;

detecting a minimum competition path metric value out of the detected competition path metric values;

determining whether the detected minimum competition path metric value is greater than a threshold value; and

subtracting, when the minimum competition path metric value is greater than the threshold value, a given normalization value ~~to~~ from the metric values, to ~~from~~ output normalized metric values.